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## IN THE CLAIMS

1. (Currently Amended) A method comprising:

identifying <u>first overlap information regarding</u> where at least two digital images overlap at a first resolution level;

purging memory, subsequent to said identifying, of the at least two digital images at the first resolution level;

dividing retrieving, subsequent to said purging, each overlapping areas of the at least two digital images into a plurality of areas at a second resolution level higher than the first resolution level based on the first overlap information; and

identifying second overlap information regarding where overlapping ones of the retrieved overlapping areas overlap at the second resolution level-overlap.

- 2. (Original) The method of claim 1, wherein each of the at least two digital images are stored at the first and second resolution levels.
- 3. (Currently Amended) The method of claim 1, wherein the method retrieving comprises:

storing dividing each of the at least two digital images into a plurality of areas at the first second resolution level in memory to identify where the at least two digital images overlap at the first resolution level; and

storing the <u>plurality of overlapping</u> areas at the second resolution level in the memory to identify where the <u>plurality of overlapping</u> areas overlap at the second resolution level-overlap.

- 4. (Currently Amended) The method of claim 1, wherein the identifying where the at least two digital images overlap at the first resolution level and the identifying where overlapping ones of the areas at the second resolution level overlap each comprise using an edge detection technique to identify the first and second overlap information.
- 5. (Currently Amended) The method of claim 1, wherein the identifying the first overlap information regarding where the at least two digital images overlap at the first resolution level comprises identifying coordinates where the at least two digital images at the first resolution level-overlap; and

wherein the identifying where retrieving the overlapping ones of the areas of the at least two digital images at the second resolution level overlap comprises identifying loading the overlapping areas based on the identified coordinates.

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6. (Original) The method of claim 1, comprising: combining the at least two digital images.

7. (Original) The method of claim 1, comprising:

identifying where the at least two digital images overlap at one or more resolution levels higher than the second resolution level.

8. (Currently Amended)\The method of claim 1, comprising:

identifying <u>further</u>, <u>first overlap information regarding</u> where another set of at least two digital images overlap at the first resolution level;

dividing each image retrieving overlapping areas of the other set of at least two digital images into a plurality of areas at the second resolution level based on the further, first overlap information;

identifying <u>further</u>, <u>second overlap information regarding</u> where overlapping ones of the <u>retrieved overlapping</u> areas <u>overlap</u> of the other set of at least two digital images at the second resolution level-overlap; and

combining the digital images.

9. (Currently Amended) A computer readable medium having instructions that, when executed by a computer, perform a method comprising:

identifying <u>first overlap information regarding</u> where at least two digital images overlap at a first resolution level;

purging memory, subsequent to said identifying, of the at least two digital images at the first resolution level;

dividing retrieving, subsequent to said purging, each overlapping areas of the at least two digital images into a plurality of areas at a second resolution level higher than the first resolution level based on the first overlap information; and

identifying second overlap information regarding where overlapping ones of the retrieved overlapping areas overlap at the second resolution level-overlap.

10. (Original) The computer readable medium of claim 9, wherein each of the at least two digital images are stored at the first and second resolution levels

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11. (Currently Amended) The computer readable medium of claim 9, wherein the method retrieving comprises:

storing dividing the at least two digital images into a plurality of areas at the first second resolution level in memory to identify where the at least two digital images overlap at the first resolution level; and

storing the <u>overlapping plurality</u> of areas at the second resolution level in the memory to identify where the <u>plurality of overlapping</u> areas <u>overlap</u> at the second resolution level-<u>overlap</u>.

- 12. (Currently Amended) The computer readable medium of claim 9, wherein the identifying where the at least two digital images overlap at the first resolution level and the identifying where overlapping ones of the areas at the second resolution level overlap each comprise using an edge detection technique to identify the first and second overlap information.
- 13. (Currently Amended) The computer readable medium of claim 9, wherein the identifying <u>first overlap information regarding</u> where the at least two digital images overlap at the first resolution level comprises identifying coordinates where the at least two digital images <u>overlap</u> at the first resolution level-<u>overlap</u>; and

wherein the identifying where retrieving the overlapping ones of the areas of the at least two digital images at the second resolution level overlap comprises identifying loading the overlapping areas based on the identified coordinates.

- 14. (Original) The computer readable medium of claim 9, wherein the method comprises combining the at least two digital images.
- 15. (Original) The computer readable medium of claim 9, wherein the method comprises identifying where the at least two digital images over ap at one or more resolution levels higher than the second resolution level.
- 16. (Currently Amended) The computer readable medium of claim 9, wherein the method comprises:

identifying <u>further</u>, <u>first overlap information regarding</u> where another set of at least two digital images overlap at the first resolution level;

dividing each image retrieving overlapping areas of the other set of at least two digital images into a plurality of areas at the second resolution level based on the further, first overlap information;

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identifying <u>further</u>, <u>second overlap information regarding</u> where overlapping ones of the <u>retrieved overlapping</u> areas of the other set of at least two digital images <u>overlap</u> at the second resolution level<del>-overlap</del>; and

combining the digital images.

- 17. (Currently Amended) A computer system comprising:
- (a) one or more processors; and
- (b) a computer readable medium to store instructions that, when executed by the one or more processors, perform:
- (i) identifying <u>first overlap information regarding</u> where at least two digital images overlap at a first resolution level,
- (ii) purging memory, subsequent to said identifying, of the at least two digital images at the first resolution level;
- (iii) <u>dividing retrieving</u>, subsequent to said purging, <u>each overlapping areas</u> of the at least two digital images into a plurality of areas at a second resolution level higher than the first resolution level <u>based</u> on the first overlap information, and
- (iv) identifying second overlap information regarding where overlapping ones of the retrieved overlapping areas overlap at the second resolution level-overlap.
- 18. (Original) The computer system of claim 17, comprising a computer readable medium to store each of the at least two digital images at the first and second resolution levels.
- 19. (Currently Amended) The computer system of claim 17, comprising memory, the computer readable medium to store instructions that, when executed by the one or more processors, performwherein retrieving comprises:

storing dividing each of the at least two digital images into a plurality of areas at the first second resolution level in the memory to identify where the at least two digital images overlap at the first resolution level, and

storing the <u>plurality of overlapping</u> areas at the second resolution level in the memory to identify where the <u>plurality of overlapping</u> areas <u>overlap</u> at the second resolution level-overlap.

20. (Currently Amended) The computer system of claim 17, wherein the identifying where the at least two digital images overlap at the first resolution level and the identifying where overlapping ones of the areas at the second resolution level overlap each comprise using an edge detection technique to identify the first and second overlap information.

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21. (Currently Amended) The computer system of claim 17, wherein the identifying where the at least two digital images overlap at the first resolution level comprises identifying coordinates where the at least two digital images at the first resolution level overlap; and

wherein the identifying where retrieving the overlapping ones areas of the areas at least two digital images at the second resolution level overlap comprises identifying loading the overlapping areas based on the identified coordinates.

- 22. (Original) The computer system of claim 17, the computer readable medium to store instructions that, when executed by the one or more processors, perform combining the at least two digital images.
- 23. (Original) The computer system of claim 17, the computer readable medium to store instructions that, when executed by the one or more processors, perform identifying where the at least two digital images overlap at one or more resolution levels higher than the second resolution level.
- 24. (Currently Amended) The computer system of claim 17, the computer readable medium to store instructions that, when executed by the one or more processors, perform:

identifying <u>further</u>, <u>first overlap information regarding</u> where another set of at least two digital images overlap at the first resolution level,

purging memory, subsequent to said identifying, of the at least two digital images at the first resolution level;

dividing each image of the other setretrieving, subsequent to said purging, overlapping areas of at least two digital images into a plurality of areas at the second resolution level based on the further, first overlap information;

identifying <u>further</u>, <u>second overlap information regarding</u> where overlapping ones of the <u>retrieved overlapping</u> areas of the other set of at least two digital images <u>overlap</u> at the second resolution level-<u>overlap</u>, and

combining the digital-images.

25. (Currently Amended) A computer system comprising:

means for identifying <u>first overlap information regarding</u> where at least two digital images overlap at a first resolution level;

means for purging memory, subsequent to said identifying, of the at least two digital images at the first resolution level;

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means for <u>dividingretrieving</u>, subsequent to said purging, <u>each overlapping areas</u> of the at least two digital images <u>into a plurality of areas</u> at a second resolution level higher than the first resolution level <u>based on the first overlap information</u>; and

means for identifying <u>second overlap information regarding</u> where overlapping ones of the <u>retrieved overlapping</u> areas <u>overlap</u> at the second resolution level<del>-overlap</del>.

26. (Currently Amended) The computer system of claim 25, comprising:
means for storing-dividing the at least two digital images into a plurality of areas at the first second resolution level in memory to identify where the at least two digital images overlap at the first resolution level; and

means for storing the <u>plurality of overlapping</u> areas at the second resolution level in the memory to identify where the <u>plurality of overlapping</u> areas <u>overlap</u> at the second resolution level overlap.

- 27. (Original) The computer system of claim 25, comprising: means for combining the at least two digital images.
- 28. (Currently Amended) The method of claim 1, wherein the <u>dividing retrieving</u> further comprises dividing each of the at least two digital images at the second resolution level into a plurality of tiles each having a size less than a threshold size.
- 29. (Currently Amended) The computer readable medium of claim 9, wherein the retrieving further dividing comprises dividing each of the at least two digital images at the second resolution level into a plurality of tiles each having a size less than a threshold size.
- 30. (Currently Amended) The computer system of claim 17, wherein the dividing comprises retrieving further dividing each of the at least two digital images at the second resolution level into a plurality of tiles each having a size less than a threshold size.
- 31. (Currently Amended) The computer system of claim 25, wherein the dividing means comprises means for dividing each of the at least two digital images at the second resolution level into a plurality of tiles each having a size less than a threshold size.

Claims 32-43 (Cancelled)